

**CLAIMS**

**What is claimed is:**

1. A continuous release composition comprising an elastomeric matrix and at least one active agent, the active agent being released from the matrix into the environment substantially continuously over an extended period of time and the said matrix being the reaction product of a carboxyl-terminated polymer with a polycarbodiimide.
2. The composition of claim 1 wherein the ratio of polycarbodiimide to carboxyl-terminated polymer is 0.7 to 6.0.
3. The composition of claim 1 wherein the carboxyl-terminated polymer is hydrophobic.
4. The composition of claim 1 wherein the carboxyl-terminated polymer is hydrophobic and a major component is selected from the group consisting of carboxyl-terminated polybutadiene, carboxyl-terminated polyisoprene, carboxyl-terminated copolymers of butadiene with acrylonitrile, carboxyl-terminated copolymers of butadiene with styrene, carboxyl-terminated copolymers of isoprene with acrylonitrile, carboxyl-terminated copolymers of isoprene with styrene, and mixtures thereof.
5. The composition of claim 4 wherein the major component is at least 90% of the polymer, by weight.
6. The composition of claim 1 wherein the carboxyl-terminated polymer is hydrophobic and the ratio of polycarbodiimide to carboxyl-terminated polymer is 0.7 to 1.4.
7. The composition of claim 1 wherein the carboxyl-terminated polymer is hydrophobic and has an average molecular weight in the range of 1000 to 20,000.
8. The composition of claim 1 wherein the carboxyl-terminated polymer is hydrophilic and a major component is selected from the group consisting of carboxyl-terminated polyethylene oxides, carboxyl-terminated polyether polyols.
9. The composition of claim 8 wherein the major component is at least 90% of the polymer, by weight.
10. The composition of claim 1 wherein the carboxyl-terminated copolymer is the reaction product of a mixture of alkylene oxides comprising ethylene oxide and an alkylene oxide having 3-6 carbons atoms.

11. The composition of claim 1 wherein the carboxyl-terminated copolymer is the reaction product of a mixture of alkylene oxides comprising ethylene oxide and at least one alkylene oxide having 3-6 carbons atoms and wherein the alkylene oxide having 3-6 carbons atoms comprises more than 50 mole percent of said copolymer.
12. The composition of claim 1 wherein the carboxyl-terminated copolymer is the reaction product of a mixture of alkylene oxides comprising ethylene oxide and at least one alkylene oxide having 3-6 carbons atoms and wherein the alkylene oxide having 3-6 carbons atoms comprises more than 50 mole percent of said copolymer and the copolymer has a molecular weight from 400 to 20,000.
13. The composition of claim 1 wherein the polycarbodiimide is selected from the group consisting of aromatic, cycloaliphatic, aliphatic and heterocyclic carbodiimides, and mixtures of thereof.
14. The composition of claim 1 wherein polycarbodiimide has an average functionality of at least 2.
15. The composition of claim 1 further comprising one or more inert components which do not interfere in the carboxylic acid-carbodiimide reaction.
16. The composition of claim 1 further comprising one or more inert components which do not interfere in the carboxylic acid-carbodiimide reaction selected from the group consisting of fillers, plasticizers, stabilizers, pigments, and fungicides.
17. The composition of claim 1 wherein the carboxyl-terminated polymer has a molecular weight of 1000 to 10,000 and is a carboxyl-terminated polybutadiene or a carboxyl-terminated polyisoprene and an average carboxylic acid functionality in the range of 1.8 to 8.0.
18. The composition of claim 1 wherein the at least one active agent is dissolved in the matrix.
19. The composition of claim 1 wherein the at least one active agent is dispersed in the matrix.
20. The composition of claim 1 wherein the at least one active agent is present in an amount of about 10% to 90% by weight based on the total weight of the elastomeric matrix.
21. The composition of claim 1 wherein the at least one active agent comprises a fragrance.
22. The composition of claim 1 in the form of a gel.
23. An article formed from the composition of claim 1.
24. Article according to claim 23 comprising an elastomeric matrix and at least one biologically or nonbiologically active agent contained in the matrix, the said active agent

being released from the matrix into the environment substantially continuously over an extended period of time and the said matrix being formed by a process comprising reacting a carboxyl-terminated polymer, selected from either hydrophobic or hydrophilic carboxyl terminated polymers, with a polycarbodiimide.

25. Article according to claim 23 wherein a) the said hydrophobic carboxyl-terminated polymer comprises a major component selected from the group consisting of carboxyl-terminated polybutadiene, carboxyl-terminated polyisoprene, carboxyl-terminated copolymers of butadiene with acrylonitrile, carboxyl-terminated copolymers of butadiene with styrene, carboxyl-terminated copolymers of isoprene with acrylonitrile, carboxyl-terminated copolymers of isoprene with styrene, and mixtures of the above, the carboxylic acid terminated polymer having an average molecular weight in the range of 1000 to 20000; and b) the said hydrophilic carboxyl-terminated polymer comprises a major component selected from the group consisting of carboxyl-terminated polyethylene oxides, carboxyl-terminated polyether polyols which are copolymers of ethylene oxide and of an alkylene oxide having 3-6 carbons atoms, in an amount of not more than 50 mole percent of said copolymer and having molecular weight from 400 to 20000.
26. The article of claim 23 in a form which is suitable for either biological or non-biological action.
27. The article of claim 23 in a form suitable for providing insecticidal, fungicidal, deodorant, molluscicidal, anticorrosive, antistatic, pheromone, or antiseptic action over an extended period of time.
28. Article according to claim 23, wherein the said active agent is selected from pheromones
29. A method of providing insecticidal, fungicidal, deodorizing, molluscicidal, anticorrosive, antistatic, pheromonal, or antiseptic action over an extended period of time comprising providing an article of claim 23 wherein the active agent is an insecticide, fungicide, deodorant, molluscicide, anticorrosive, antistatic, pheromone, antiseptic, or a mixture of such agents.
30. A method of preparing a composition of claim 1 comprising the carboxyl-terminated polymer with the polycarbodiimide in the presence of the active agent.